

Amendments to the Claims:

Please amend the claims as follows:

Cancel claims 287 and 290.

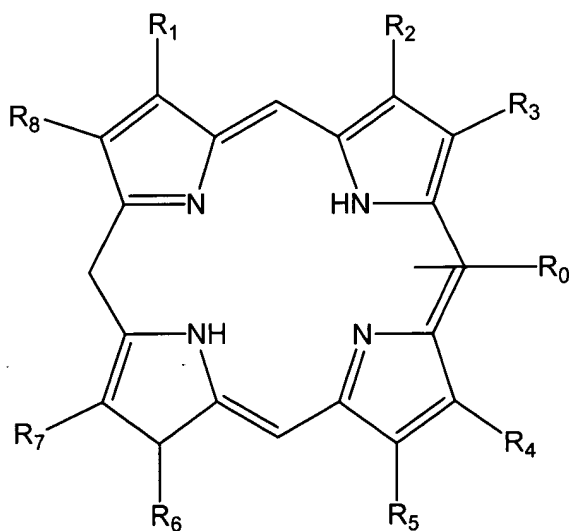
287. (CANCELED)

288. (CANCELED)

289. (CANCELED)

290. (CANCELED)

291. (CURRENTLY AMENDED) The labeling reagent of claim 287, A labeling reagent comprising a nonmetallic porphyrin, said reagent comprising:

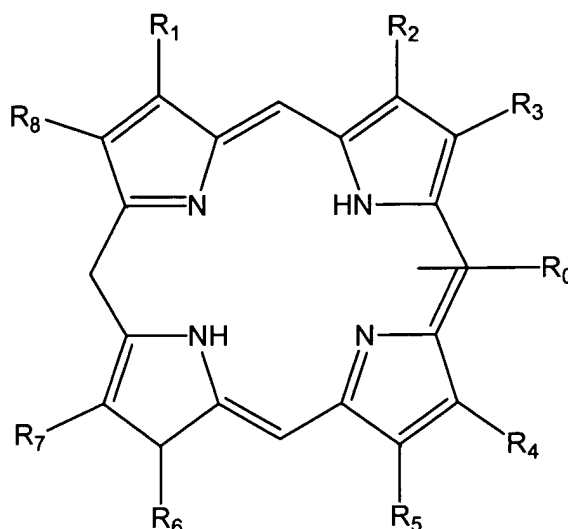


wherein R₀ is a reactive group and is attached directly or indirectly to any one of the four non-pyrrole positions of said nonmetallic porphyrin, and R₁ through R₈ independently comprise hydrogen, aliphatic, unsaturated aliphatic, cyclic, heterocyclic, aromatic, heteroaromatic, charged or polar groups, or any combinations of the foregoing, wherein said reactive group R₀ comprises
sulfhydryl, hydroxyl, amine, isothiocyanate, isocyanate, monochlorotriazine, dichlorotriazine, mono- or di-halogen substituted pyridine, mono- or di-halogen substituted diazine, maleimide, aziridine, sulfonylhalide, acid halide, hydroxysuccinimide ester, hydroxysulfosuccinimide ester, imidoester, hydrazine, azidonitrophenyl, azide, 3-(2-pyridyldithio)-propionamide, glyoxal,
~~wherein said reactive group R₀ comprises~~ an alkene group, an alkyne group or a halogenated compound.

292. (CURRENTLY AMENDED) The labeling reagent of claim ~~287~~ 291, wherein any of said R₁ through R₈ alkyl groups comprises methyl, ethyl or propyl.

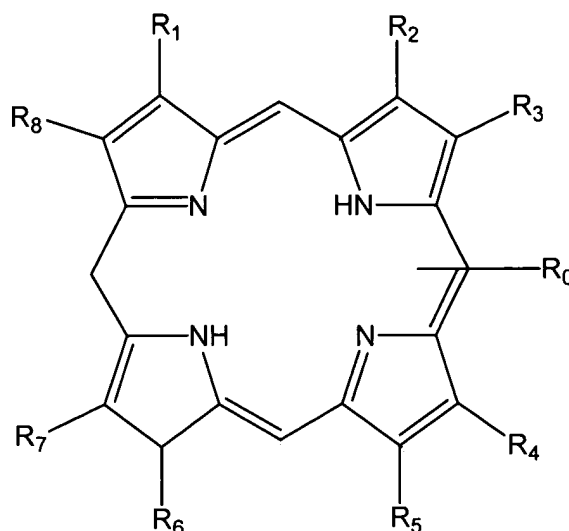
293. (CURRENTLY AMENDED) The labeling reagent of claim ~~287~~ 291, wherein any of said R₁ through R₈ alkyl groups further comprises a polar or charged group.

294. (CURRENTLY AMENDED) ~~The labeling reagent of claim 287,~~ A labeling reagent comprising a nonmetallic porphyrin, said reagent comprising:



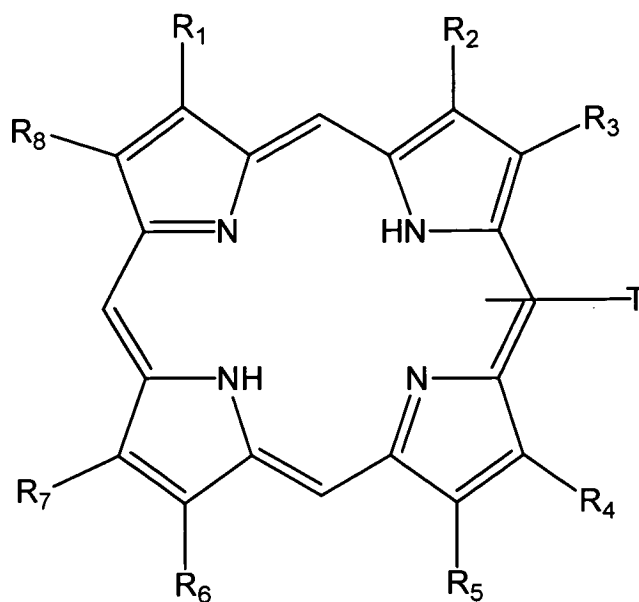
wherein R_0 is a reactive group and is attached directly or indirectly to any one of the four non-pyrrole positions of said nonmetallic porphyrin, and R_1 through R_8 independently comprise hydrogen, aliphatic, unsaturated aliphatic, cyclic, heterocyclic, aromatic, heteroaromatic, charged or polar groups, or any combinations of the foregoing, wherein said reactive group R_0 comprises
sulphydryl, hydroxyl, amine, isothiocyanate, isocyanate, monochlorotriazine, dichlorotriazine,
mono- or di-halogen substituted pyridine, mono- or di-halogen substituted diazine, maleimide,
aziridine, sulfonylhalide, acid halide, hydroxysuccinimide ester, hydroxysulfosuccinimide ester,
imidoester, hydrazine, azidonitrophenyl, azide, 3-(2-pyridyldithio)-propionamide, glyoxal,
aldehyde, or a moiety capable of forming a carbon-carbon linkage with a target wherein said
moiety is an alkene group, an alkyne group or a halogenated compound, and wherein said
reactive group R_0 is attached indirectly to said nonmetallic porphyrin through a linker arm.

295. (CURRENTLY AMENDED) The labeling reagent of claim 294, A labeling reagent
comprising a nonmetallic porphyrin, said reagent comprising:



wherein R_0 is a reactive group and is attached directly or indirectly to any one of the four non-pyrrole positions of said nonmetallic porphyrin, and R_1 through R_8 independently comprise hydrogen, aliphatic, unsaturated aliphatic, cyclic, heterocyclic, aromatic, heteroaromatic, charged or polar groups, or any combinations of the foregoing, wherein said reactive group R_0 comprises
sulfhydryl, hydroxyl, amine, isothiocyanate, isocyanate, monochlorotriazine, dichlorotriazine,
mono- or di-halogen substituted pyridine, mono- or di-halogen substituted diazine, maleimide,
aziridine, sulfonylhalide, acid halide, hydroxysuccinimide ester, hydroxysulfosuccinimide ester,
imidoester, hydrazine, azidonitrophenyl, azide, 3-(2-pyridyldithio)-propionamide, glyoxal,
aldehyde, or a moiety capable of forming a carbon-carbon linkage with a target wherein said
moiety is an alkene group, an alkyne group or a halogenated compound, wherein said reactive
group R_0 is attached indirectly to said non-metallic porphyrin through a linker arm and said
linker arm comprises at least two consecutive peptide bonds.

296. (PREVIOUSLY PRESENTED) A labeled target comprising a nonmetallic porphyrin, said reagent comprising:



wherein T is a target molecule attached directly or indirectly to any one of the four non-pyrrole positions of said nonmetallic porphyrin and R₁ through R₈ independently comprise hydrogen, aliphatic, unsaturated aliphatic, cyclic, heterocyclic, aromatic, heteroaromatic, charged or polar groups, or any combinations of the foregoing, wherein said target T comprises a nucleic acid, a nucleotide or a nucleic analog, a receptor, a hormone, a lymphokine, a cytokine, a toxin, a carbohydrate, a sugar or an oligo- or polysaccharide.

297. (CANCELED)

298. (CANCELED)

299. (PREVIOUSLY PRESENTED) The labeled target of claim 296, wherein said nucleic acid or nucleotide or nucleotide analog is modified.

300. (PREVIOUSLY PRESENTED) The labeling reagent of claim 296, wherein any of said R₁ through R₈ alkyl groups comprises methyl, ethyl or propyl.

301. (PREVIOUSLY PRESENTED) The labeling reagent of claim 296, wherein any of said R₁ through R₈ alkyl groups further comprises a polar or charged group.

302. (PREVIOUSLY PRESENTED) The labeling reagent of claim 296, wherein said target T is attached indirectly to said nonmetallic porphyrin through a linker arm.

303. (PREVIOUSLY PRESENTED) The labeling reagent of claim 302, wherein said linker arm comprises at least two consecutive peptide bonds.

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